



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/865,275

05/25/2001

Frank J. DeGilio

POU920010080US1

3625

7590

09/25/2006

IBM Corporation
Intellectual Property Law
2455 South Road, P386
Poughkeepsie, NY 16201

EXAMINER

CRAIG, DWIN M

ART UNIT

PAPER NUMBER

2123

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/865,275

Applicant(s)

DEGILIO ET AL.

Examiner

Dwin M. Craig

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/7/2001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-17 have been presented for examination.

Information Disclosure Statement

2. The IDS submitted on 12/17/2001 is objected to, the listing of US non-provisional Patent Application numbers in the IDS is improper. Applicants' need to list the serial numbers of a US Non-provisional patent applications on a separate from the 1449 or provide the US-PGPUB publication numbers. The examiner considered the submitted list of the US non-provisional Patent Applications.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 3-7, 9-11 and 13-17 are rejected under 35 USC 103(a) as being unpatentable over US Patent 6,718,218 Matheson in view of US Patent 6,614,430 Rappoport.

3.1 As regards independent claims 1, 7 and 11 and using independent claim 1 as an example, *Matheson teaches, a method of facilitating the information gathering and documentation phases of a custom design process, said method comprising the steps of: generating a first set of data structures for storing design constraint information (Col. 2 lines 18-33), said first set of data structures comprising two or more tables (Figure 4 references 320, 340, 330, 350, 360, 370, 380 & 390 and Figures 5-7 and Col. 5 lines 52-67 and Col. 6 lines 1-56), at least one of said tables in said first set being used to store firm design constraints (Col. 2 lines 29-33 and Col. 4 lines 13-62), at least one other of said tables in said first set being used to hold flexible design constraints (Figure 5 reference 500 & Col. 6 lines 14-22); and determining said design constraint information; and storing said design constraint information in at least one of said two or more tables (Figures 5-7 and Col. 6 lines 14-56); and assigning a class attribute to each design constraint (Figure 3 and Col. 5 lines 1-30 specifically lines 9-10, "The attributes for each interface are displayed in FIG. 3."); and generating a second set of data structures for*

Art Unit: 2123

processing said design constraint information (Figure 2 reference 120a, 120b, 130a, 130b, 140a, 140b), said second set of data structures being greater in number than said first set, said class attributes determining the relationship between said first set of data structures and said second set of data structures (Figure 2 and Figure 8 and Col. 6 lines 56-67 and Col. 7 lines 1-67 the examiner notes that the notes tables could be less in number than the first set of tables).

However, *Matheson* does not expressly disclose *translating said stored design constraint information from said first set of data structures into said second set of data structures for subsequent processing during said custom design process.*

Rappoport teaches *translating a stored design constraint information from a first set of data structures into a second set of data structures for subsequent processing during a custom design process (Figure 1B references 170 & 180 and Col. 3 lines 58-67 and Col. 4 lines 1-49 and Col. 5 lines 66-67 and Col. 6 lines 1-18 and Col. 6 lines 35-45 and as regards attributes Col. 11 lines 25-35).*

Matheson and *Rappoport* are analogous art because they are from the same field of endeavor of CAD design process modeling.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide the methods of CAD data translation as disclosed in *Rappoport* to the CAD design process methods of *Matheson*.

The motivation to do so would be to provide a method of using any design data created using the CAD methods of *Matheson* in any other CAD design tool by having the ability to translate the data from one format to another without losing any design information (see *Rappoport* Col. 6 Lines 36-44).

Art Unit: 2123

Therefore, it would have been obvious to combine *Rappoport* with *Matheson* to obtain the invention specified in claims 1, 3-7, 9-11 and 13-17.

3.2 As regards dependent claims 3, 4, 9, 10, 13 and 14 and using dependent claims 3 & 4 as examples, *Matheson* teaches tables/data structures that contain both firm and flexible design constraints (Figures 4-8 note in Figures 5-7 the different types of tables and Col. 5 lines 52-67 and Col. 6 lines 1-67 and Col. 7 lines 1-16).

3.3 As regards dependent claims 5 & 15 and using dependent claim 5 as an example, *Matheson* teaches an electronic computer (Col. 1 line 11 “Computer Aided Design...”).

3.4 As regards dependent claim 6 *Matheson* does not expressly disclose, *translating* CAD data on a computer.

However, *Rappoport* discloses *translating* CAD data on a computer (Col. 1 lines 15-21 and Col. 4 lines 16-33).

3.5 As regards dependent claim 16 *Matheson* discloses a pointing device (Figure 8 & Col. 3 lines 11-12 “...a graphical user interface...” the examiner notes that GUI on computer systems require the use of a pointing device).

3.6 As regards dependent claim 17, *Matheson* discloses, a text input device (Figure 8 & Col. 6 lines 47-56 “...Data may be captured when a user manually enters data via a user interface dialog...”).

4. Claims 2, 8 and 12 are rejected under 35 USC 103(a) as being unpatentable over US Patent 6,718,218 Matheson in view of US Patent 6,614,430 Rappoport and in further view of US Patent 5,850,539 Cook.

Art Unit: 2123

4.1 Regarding dependent claims 2, 8 and 12 neither *Matheson* nor *Rappoport* expressly disclose, an information technology design process.

However, *Cook* teaches an information technology design process (Figures 2-21 and Col. 2 lines 50-57 and Col. 6 lines 65-67 and Col. 7-14 and Col. 15 lines 1-47).

Matheson, *Rappoport* and *Cook* are analogous art because they are from the same field of endeavor, Computer Aided Design CAD.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have used the information technology design process method of *Cook* with the CAD design methods of *Matheson* and *Rappoport*.

The motivation for doing so would have been the need in the information technology design process art to take into account the thermal requirements of rack mounted computer systems see (*Cook* Col. 2 lines 5-65).

Therefore, it would have been obvious to combine, *Cook* with *Rappoport* and *Matheson* in order to obtain the invention specified in claims 2, 8 and 12.

Conclusion


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwain M. Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2123

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dwin McTaggart Craig



PAUL RODRIGUEZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

9/18/06